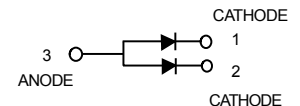
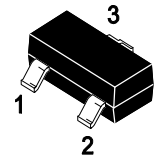


**100mA Silicon Epitaxial Planar Switching Diode -85V****PRIMARY CHARACTERISTICS**

V_{RM}	85V
I_F	100mA
V_F	1.2V
$T_{J,Max}$	150°C

SOT-23**PACKAGE**

Marking : A3

**FEATURES**

- Small package
- Low forward voltage
- Fast reverse recovery time
- Small total capacitance
- Moisture Sensitivity Level 1

MECHANICAL DATA

- Case : Molded plastic,SOT-23
- Polarity : Shown above
- Terminals :Plated terminals, solderable per MIL-STD-750,Method 2026
- Epoxy : UL94-V0 rated flame retardant

Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Maximum Peak Reverse Voltage	V_{RM}	85	V
Reverse Voltage	V_R	80	V
Average Rectified Forward Current	$I_{F(AV)}$	100	mA
Maximum Peak Forward Current	I_{FM}	300	mA
Non-repetitive Peak Forward Surge Current (10 ms)	I_{FSM}	2	A
Power Dissipation	P_{tot}	350	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	- 55 to + 150	°C

Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Max.	Unit
Forward Voltage at $I_F = 100\text{ mA}$	V_F	1.2	V
Reverse Current at $V_R = 30\text{ V}$ at $V_R = 80\text{ V}$	I_R	0.1 0.5	μA
Total Capacitance at $V_R = 0$, $f = 1\text{ MHz}$	C_T	4	pF
Reverse Recovery Time at $I_F = 10\text{ mA}$	t_{rr}	4	ns



100mA Silicon Epitaxial Planar Switching Diode -85V

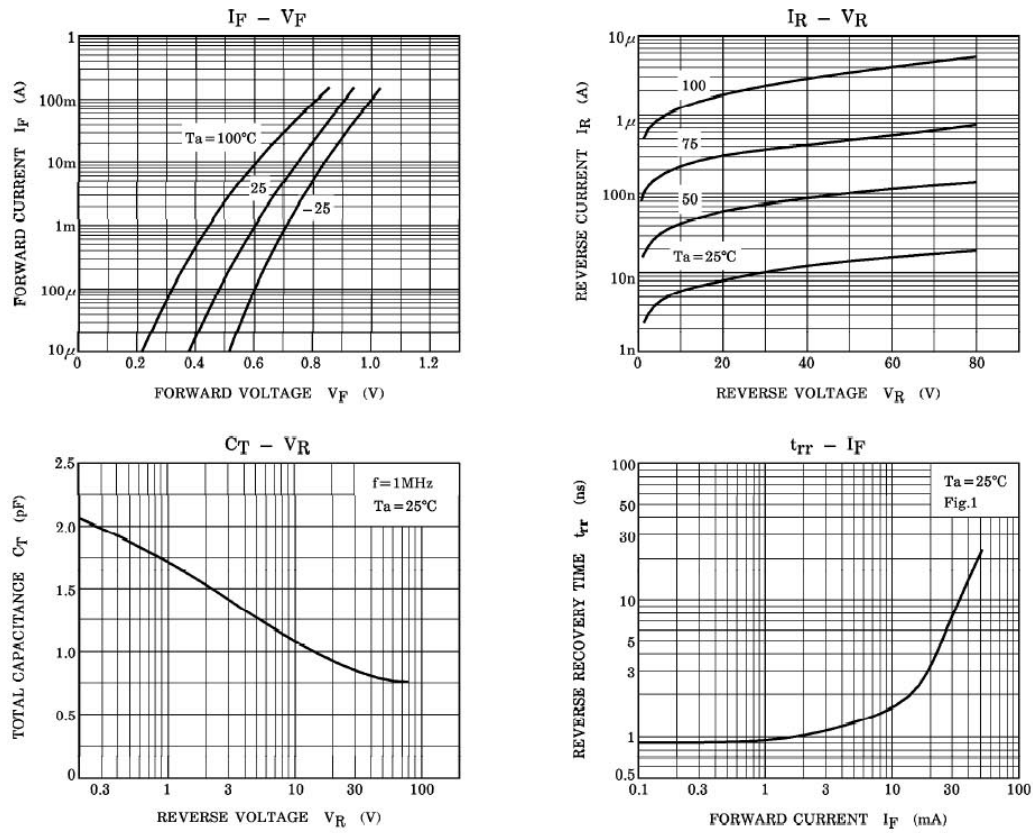
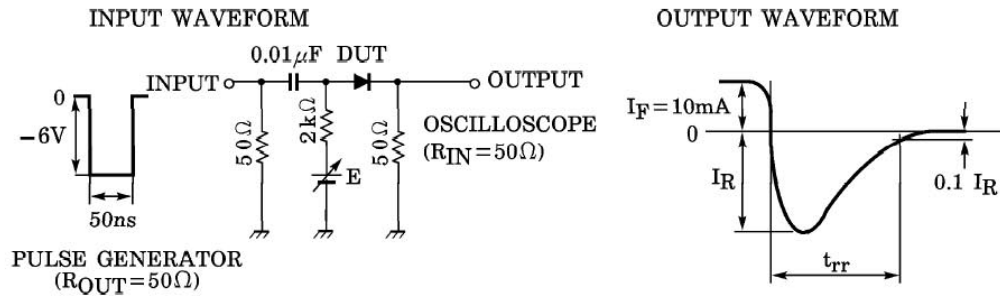
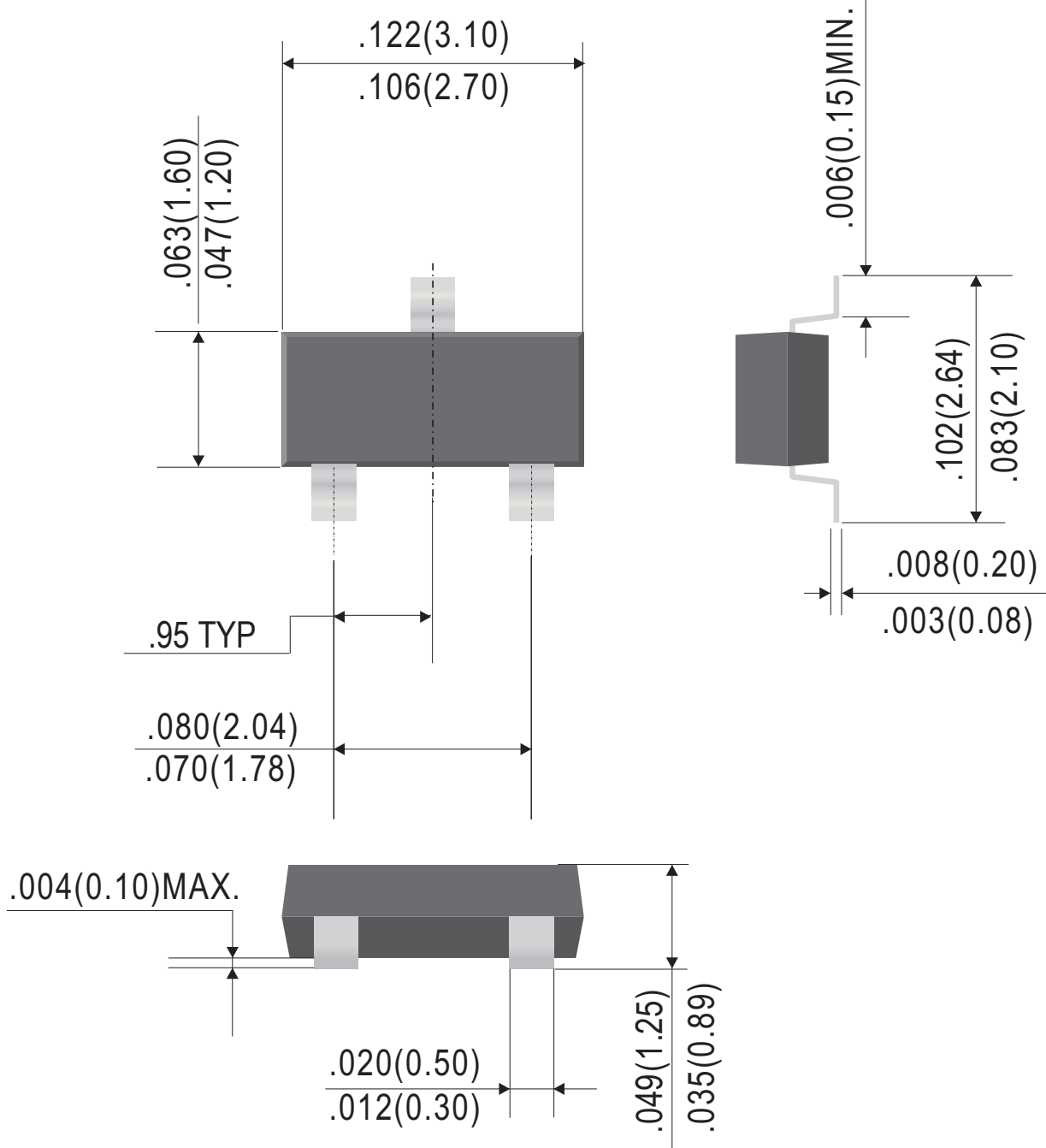


Fig.1 Reverse recovery time (t_{rr}) test circuit



Outline Drawing

SOT-23

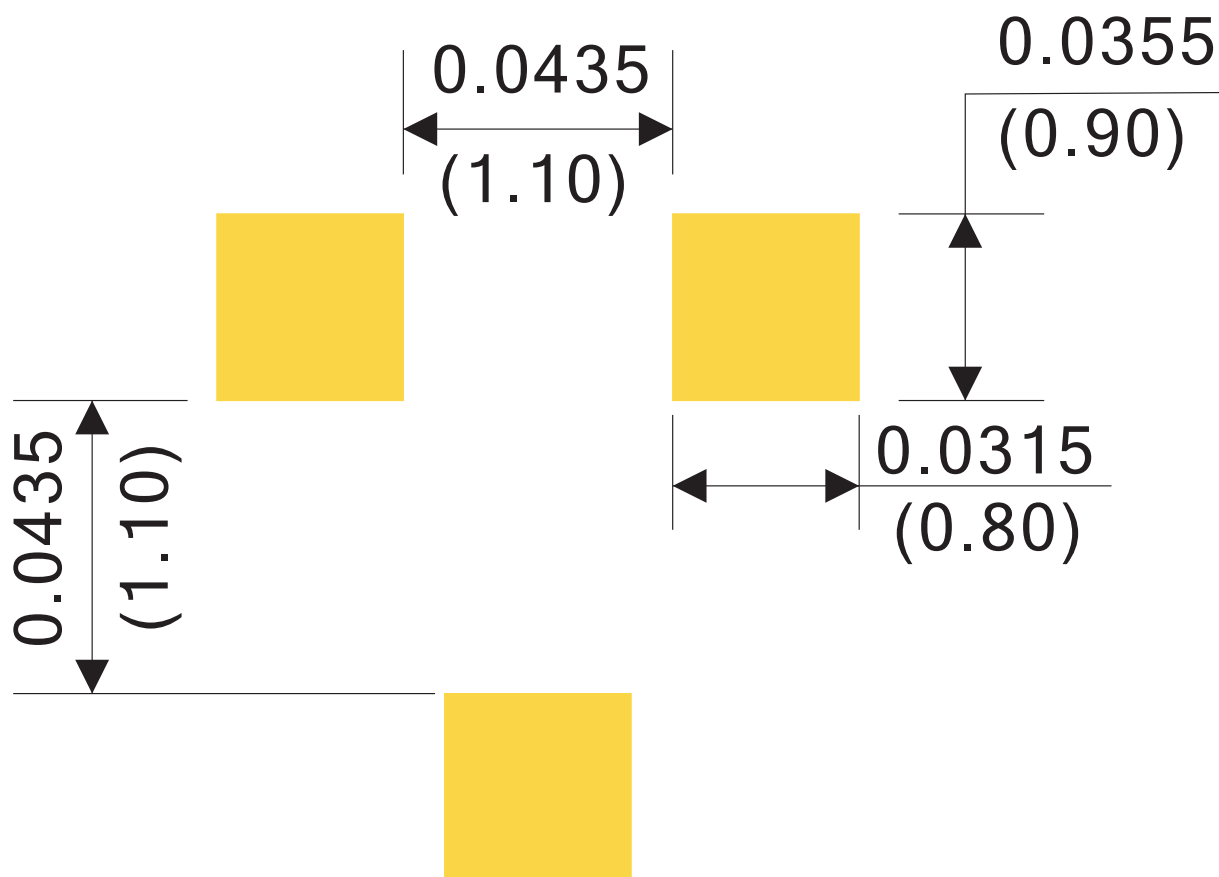


Dimensions in inches and (millimeters)

Rev.E

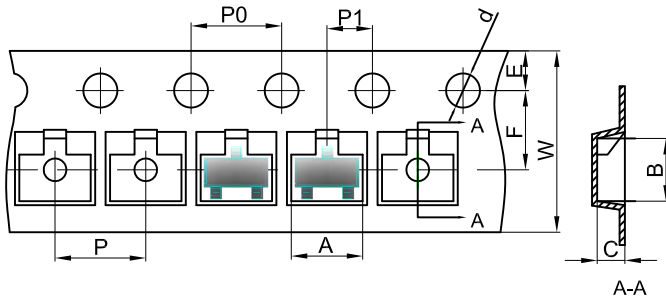
Suggested Soldering Pad Layout

SOT-23



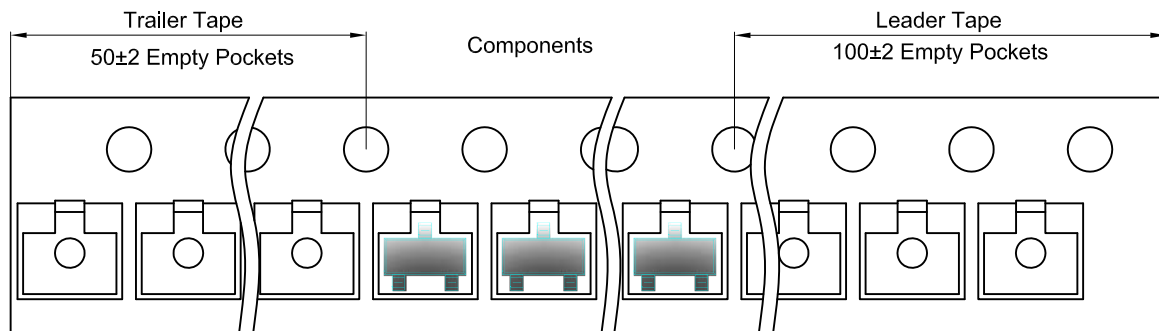
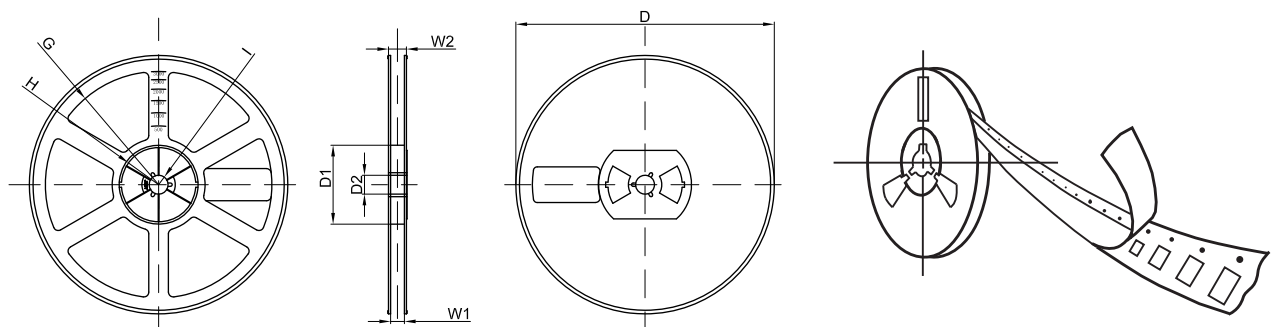
Dimensions in inches and (millimeters)

RevA

100mA Silicon Epitaxial Planar Switching Diode -85V
SOT-23 Embossed Carrier Tape

Packaging Description:

SOT-23 parts are shipped in tape. The carrier tape is made from a dissipative (carbon filled) polycarbonate resin. The cover tape is a multilayer film (Heat Activated Adhesive in nature) primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed agent. These reeled parts in standard option are shipped with 3,000 units per 7" or 17.8cm diameter reel. The reels are clear in color and is made of polystyrene plastic (anti-static coated).

Dimensions are in millimeter										
Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOT-23	3.15	2.77	1.22	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00

SOT-23 Tape Leader and Trailer

SOT-23 Reel


Dimensions are in millimeter								
Reel Option	D	D1	D2	G	H	I	W1	W2
7"Dia	Ø178.00	54.40	13.00	R78.00	R25.60	R6.50	9.50	12.30

Ordering Information:

Device PN	Packing
1SS181N -T ⁽¹⁾ H ⁽²⁾ -WS ⁽³⁾	Tape&Reel: 3 Kpcs/Reel

Note: (1) Packing code, Tape & Reel Packing

(2) Halogen free product for packing code suffix "H"

(3) WS : Willas brand abbreviation, Label Type does not display

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